

Release Notes for MDC v4.1 Final

This version of the MDC software fixes bugs and other problems reported in v4.1 Beta. Specific changes are summarized in the table below.

CHANGES IN MDC V4.1 FINAL

Module	Function	Spec/RT	Problem/Change Description
MDC General	Data Entry	RT 102	Added "Wet Corn Milling" Code 2046 to SIC code list.
		RT 505	Removed OTHER and SIP from available program codes.
		RT 510	When determining valid system parameters to include in data entry pick list, include all program records (RT 505) active within 6 months after current date.
		RT 586	Display OS indicator flag for all units (previously was restricted to OTC or SUBH units).
		RT 606	Program crashed when trying to add RT 606. UnitInfo table was incorrectly mapped. Corrected to map based on config.fpw file.
		RATA, Linearity, 7 day cal, offline cal, cycle time tests	If the end date of one test was changed to the same quarter as the end date of another test (same type) for the same system and with the same test number, the end date was changed and some injections were moved to the wrong test. This problem was fixed.
		RT 629: FFLRF-7 and 8	Added units of measure codes 5 and 6. Also modified FFLRF-7 and 8 accordingly.
		RT 698: QEXP-1C	From the data entry screen, if QEXP-1C was generated, you could not leave the data entry screen. Added option to continue without changing.
	Data Import	ARP-IMP7	Removed this check.
		NBP-IMP2A, NBP-IMP16A and NBP-IMP16B	Added import error messages and modified current message to indicate when RT 900+ are rejected due to missing key information (e.g., DR/ADR indicator).
		RT 650	Eliminated infinite loop when importing UDEF test with bad combination of H flags.
			Fixed import bug that resulted in old and bad EDRs not getting cleaned up in the Work Directory.
			Added a new import message when user asks to import mp data and no RT 503, 504 or 505 records were in the file.
	Import Hourly and MP/QA		Fixed crash that occurred if user imported multiple quarters at the same time through MDCLoad.dll.
	Data Export		Added option to allow user to select version number in RT 100 (v2.1 or v2.2).

Module	Function	Spec/RT	Problem/Change Description
MDC General (cont.)	MP Evaluation	RT 102	Added a table check for Source Category values in RT 102 (Facility level data).
		ARP-2B&2C	Change spec to handle complex configuration so that no error is produced if there is only one multiple stack.
		ARP-11/ NBP-57	Removed AMS methods from checks in ARP-11 and NBP-57.
		ARP-20	Removed this check because the requirement that certain boiler types only be used for coal-fired units was removed from the EDR instructions.
		ARP-26G	MEC is now rounded UP to the nearest 10 ppm not just to the nearest 10 ppm.
		ARP-31A	Changed to allow blanks in RT 536 Columns 22 through 25 for non-peaking unit if it is using LME methods.
		ARP-37/RT 556	Added RT 556 Event Code 160 to look-up table. ARP-37 fixed.
		ARP-42, 50 and 74	Re-added LPG as fuel type for 585 and 587 and changed specs to allow this.
		ARP-61	Removed this check (duplicated ARP-72).
		NBP-2B/ Active 505 definition	1. Changed evaluation such that when NBP-2B is generated, no other errors are reported. 2. Modified definition of active 505 to include subsequent qtr 505 if no active 505 in current qtr.
		ARP-72, ARP-2, NBP-59, MDC Hourly Check of RT 585	Modified checks to use new RT 585 information indicating unit is exempt from Heat Input reporting (e.g., for Illinois SIP units). Does not produce error if RT 585 start date matches the SUBH program date even if fuel start date is earlier.
		ARP-73B	Fixed bug that was producing false error message when there were multiple fuels that all had the same start/end date in RT 587.
		ARP-77E	Fixed bug that was failing to locate the RT 531 default value.
		NBP-2E	New check on RT 505. Code OTC or OTC-SUBH should only be used for unit in OTC state.
	QA Evaluation	FTLRF-4B	Program was incorrectly calculating the reference method value for multiple stacks using a combined ratio. Changed to calculate Qref as the sum of the average reference method values for each multiple stack RATA .
		Grace-1	Modified spec/check to include H2O system as valid system parameter for RT 699 Linearity and RATA extension.
	Reports	RT 530: Span and Full Scale Range Values	Corrected Monitoring Plan Printout to display Span value and full-scale range values in RT 530 to three decimal places if units of measure = MSCFH. (Just like INH2O.)
		RT 610: Test Detail Report	Fixed listed specification for SUBH NOXC RATA to be 10% (was incorrectly shown as 20%). Also abbreviated number of Operating levels at the top of the report to fit all of SCFH on the page.
		RT 645	Fixed RT 645 Evaluation Report when report crashed with the error "file is in use."

Module	Function	Spec/RT	Problem/Change Description
MDC General (cont.)	Reports (cont.)	RT 645: Test Detail Report	Remove "Calculated" fields from the RT 645 detail report. (EDR v2.2 reserved these fields for LME qualification.)
		Certification Summary Report	Fixed crash in Certification Summary Report.
	File Open		Removed P_codes2.dbf from otc_open and otc_opn. This file is no longer being installed.
	Printing		For some NT Users PQAPrint.dll was crashing with message "Unable to create temporary work files." This seems to be due to a problem with ADO (in VB) accessing FoxPro memo fields. Modified program so that memo fields are no longer read. Text files created instead.
	MP Comparison		Fixed bug that was producing a Comparison Error Report indicating that the file that was exported from MDC to compare to the file was empty.
			Removed RT 102, col. 24, RT 506, col. 31, RT 535, col. 18, and RT 560, col. 57 from the Comparison (retired in EDR v2.2). Added the new non load based unit identifier from RT 504 to the Comparison.
	Backup/ Restore		After a backup, the error "unable to find p_codes2.dbf" was generated. Fixed to allow tables to be reopened after backup.
MDC-FTP	Report Labels		The critical error report was labeled as the current quarter even if the export was done for a prior quarter. Because of this all reports were checked. The current quarter and year were replaced with the selected quarter and year in the heading of the Compliance Certification and Critical Error reports. (MP Evaluation Report already had the selected quarter and year).
	MP Evaluation Report		Fixed Monitoring Plan Data Evaluation Report to include Facility level checks (RT 102).
LME Module	LME Data Entry/ Export		Fixed errors causing Base-Peak load indicators not to appear in RTs 360 and RTs 650 and 660 not to be included in export file.
	LME Import/Export		Added new options to export LME hourly data into the format that can be imported back into MDC and to import data from quarterly EDR LME file into MDC LME module.
MDC Hourly	RT 699 handling for Multiple Quarters		Fixed bug that produced OOC-expired message when importing and evaluating multiple quarters. (The RT 699 (Grace period claim) was not being recognized properly. One quarter alone evaluated correctly (no OOC errors), but two quarters together produced OOC-expired messages for the second quarter.)
	QA Status Evaluation: Linearity		For unit or stack with NOx and NOxC systems, if linearity was only reported for one of the systems, MDC Hourly was generating bogus OOC errors for the other system. Fixed.
			Fixed checks to recognize O2WD as valid component type.

Module	Function	Spec/RT	Problem/Change Description
MDC Hourly (cont.)	QA Status Evaluation: RATA		Fixed situation where RT 695 exemption with analysis date equal to the last day of the quarter prior to RATA date was not being recognized as valid.
			Fixed the situation for the HI Diluent System where MDC Hourly falsely generated "system ID blank" error.
			Changed message "Prior multiload RATA Not at Required Op Levels" to "Could not Determine Normal Load Level for Prior Multiload RATA" when prior multiload RATA is prior to 4/1/2000 and could not find RT 536.
			Applied new policy that the BAF will be 1.000 for the duration of conditional data period if there is not an available BAF for two situations: (1) for initial certification and (2) failed or aborted RATA.
			Made the following changes to the Flow RATA QA status specification logic. (1) Between step 29 and 30, check to see if prior RATA has a single load flow claim. If yes, set the expiration date to the end of the fourth quarter following the prior RATA test quarter. (2) Steps 37, 38: instead of OOC-Expired, if this is a single load flow RATA without a single load flow claim, display OOC-Incomplete QA RATA.
	Calculation Evaluation		Fixed error that occurred when user imported and evaluated multiple quarters and one or more was a non-operating quarter (i.e., no RTs 300). (Bogus errors were produced about missing heat input for that non-operating quarter.)
	Appendix E		Corrected logic to apply new curve beginning with the hour following the completion of the test.
		Error 839	Corrected evaluation so that Error 839 is not generated for hours in which the heat input value is equal to a tested value.
	Import		EDR_Hourly.DLL checked for EDR version 2.0 and 2.1, but version 2.2 was rejected. Fixed by adding EDR 2.2 to the valid version list. EDR v2.2 also added to text introducing Import of file.
Intallation	Install PQA Print		PQAPrint.dll was not always getting registered for some reason and MDC would crash if no printers were defined. MFC42.dll is now registered.
Helpfile			Made necessary changes to support all spec changes made.